

STUDI KADAR DEBU DI UDARA PADA PENGOLAHAN KAPAS UD TUYAMAN DESA SIDOMUKTI WELERI KABUPATEN KENDAL

DEWI ISTIHARINI

*Program Studi Kesehatan Masyarakat - S1, Fakultas
Kesehatan, Universitas Dian Nuswantoro Semarang*

URL : <http://dinus.ac.id/>

Email : dewiistiharini@mhs.dinus.ac.id

ABSTRAK

UD Tuyaman adalah industri pengolahan kapas. Berdasarkan observasi terlihat debu berterbangan dan menempel pada pakaian para pekerja. Tujuan penelitian penelitian untuk mengukur kadar debu di udara di pengolahan kapas UD Tuyaman Desa Sidomukti Kabupaten Kendal.

Jenis penelitian yang digunakan adalah diskriptif. Pengambilan data dengan menggunakan metode survei, pengukuran , wawancara kepada pekerja sebagai data pendukung untuk mengetahui keluhan subyektif akibat paparan debu kapas. Instrumen penelitian berupa kuesioner, pengukuran kadar debu dengan menggunakan alat High Volume Air Sample. Populasi tempat pengolahan kapas UD Tuyaman Desa Sidomukti Kabupaten Kendal. Sampel penelitian 3 ruang yaitu ruang penjemuran, penggilingan dan pengepakan. Sampel penelitian adalah sampel jenuh sebanyak 20 pekerja.

Hasil penelitian, studi kadar debu kapas di udara UD Tuyaman Sidomukti Weleri Kabupaten Kendal di setiap ruang penjemuran $181 \mu\text{g}/\text{m}^3$ pengulangan $488 \mu\text{g}/\text{m}^3$, ruang penggilingan $7.771 \mu\text{g}/\text{m}^3$ pengulangan $15.487 \mu\text{g}/\text{m}^3$, ruang pengepakan $13.532 \mu\text{g}/\text{m}^3$ pengulangan $15.487 \mu\text{g}/\text{m}^3$ melebihi nilai ambang batas Menurut Kep. Gubernur Jawa Tengah N0.8 Tahun 2001 Tentang Pengendalian Pencemaran Udara Baku Mutu Udara Ambien dengan parameter Debu adalah $230 \mu\text{g}/\text{m}^3$. Keluhan Subyektif akibat paparan debu kapas yaitu sesak nafas (35%), nyeri dada (20%), batuk-batuk (15%).

Bagi industri pengolahan kapas untuk memasang Local Exhaust Ventililation perlu menyediakan masker sesuai standar untuk pekerja, perlu adanya upaya peningkatan kesadaran pemakaian masker standar dalam melakukan aktifitas kerja. Bagi responden mengganti dan mencuci masker secara rutin. Bagi peneliti lain melibatkan pihak medis untuk menggali adanya riwayat penyakit pada responden dengan pemeriksaan fisik menggunakan alat laboratorium.

Kata Kunci : Debu, Debu kapas, Pencemaran Udara

STUDY OF COTTON DUST IN THE AIR CONTENT PROCESSING COTTON DISTRICT UD TUYAMAN SIDOMUKTI KENDAL

DEWI ISTIHARINI

*Program Studi Kesehatan Masyarakat - S1, Fakultas
Kesehatan, Universitas Dian Nuswantoro Semarang*

URL : <http://dinus.ac.id/>

Email : dewiistiharini@mhs.dinus.ac.id

ABSTRACT

UD Tuyaman is cotton processing industry. Based on the observation of visible dust and floating cotton sticks to the clothes of the workers. Research purposes to measure the levels of cotton dust in the air in the processing of cotton dust UD Tuyaman Sidomukti Village, Kendal.

This type of research is descriptive. Use the survey method of data collection, measurement, interview workers as supporting data to determine the subjective complaints caused by exposure to cotton dust. Research instruments such as questionnaires, measurements of dust levels using a High Volume Air Sample. Population place cotton processing UD Tuyaman Sidomukti Village Kendal. 3 sample space are drying, grinding and packing room. The samples were saturated sample as many as 20 workers.

Results of research, studies of cotton dust levels in the air UD Tuyaman Sidomukti, Weleri, Kendal in every room are drying room $181 \frac{1}{4} \text{g/m}^3$ repetition $448 \frac{1}{4} \text{g/m}^3$, grinding chamber $7.771 \frac{1}{4} \text{g/m}^3$ repetition $1.374 \frac{1}{4} \text{g/m}^3$, packing room $13.952 \frac{1}{4} \text{g/m}^3$ repetition $15.487 \frac{1}{4} \text{g/m}^3$ exceeds the threshold value according to the Central Java Governor Decree 8 of 2001 on Air Pollution Control Ambient Air Quality Standards with dust parameter is $230 \frac{1}{4} \text{g/m}^3$. Subjective complaints caused by exposure to cotton dust include shortness of breath (35%), chest pain (20%), cough (15%).

For cotton processing industry to install Local Exhaust Ventilation, need to provide standard masks for workers, the need for efforts to increase awareness the use of standard masks during do the job activity. For respondents replace and wash mask regularly. For other researchers involved medic to explore a history of medical illness among respondents with a physical examination using laboratory equipment.

Keyword : dust, cotton dust, air pollution